find predictive factors of improvement of physical ability in HF-REF patients after completion of an exercise training program.

Methods Functional, clinical, biological and echocardiographic data, were retrospectively analysed in 50 HF-REF patients who underwent an exercise training program in our center in 2013. The improvement of physical abilities was defined by an increase of 1 or more metabolic equivalent (MET) between the first and the final exercise testing.

Results Patients were 58.3±12.1 years old with a mean ejection fraction of 34±10% and an average of 18.7 sessions over a 4 month period was performed. Mean pre and post training MET were respectively 4.9±1.6 and 6.1±2.3 (p<0.001). At the end of the training period, 22 patients displayed an improved exercise testing. Exercise testing improvement was associated with the absence of arterial hypertension (57% versus 27% p=0.04), and a tendency was seen with lower furosemide daily intake (25.7mg versus 84.3mg p=0.05), and lower *Heart Failure Risk of Death at 1 year calculation* (7.02% versus 10.22% p=0.05). Pre-training exercise capacity was not associated with post-training improvement (4.6±1.5 MET versus 5.2±1.8 MET p=0.17).

Conclusion HF-REF patients without previous arterial hypertension had more chance to improve physical capacities after exercise training program.

The author hereby declares no conflict of interest

0449

Correlation between clinical and echocardiographic parameters and the 6 minutes walk test in ambulatory outpatients with systolic heart failure

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Background The use of 6-minute walk test for assessing the functional status capacity of patients with chronic heart failure is commonly applied as prognostic gauges for systolic HF patients. The aim of study was to verify the impact of 6MWD in patients with chronic heart failure (CHF) and to analyze the relation between clinical and echocardiographic data and the 6 minutes walk test (6MWT) in patients with chronic systolic heart failure.

Methods and results 814 patients (age 63years, 68% males) with CHF underwent a six-minute walk test in a therapeutic unit of heart failure. Clinical data, biological and echocardiographic parametres were campared. We divided patients for 3 groups: group 1: 6MWD <300m (n=740), group 2: 300<6MWD<450 m (n=54) and group 3: 6MWD >450m (n=20). 154 patients (19%) were in NYHA functionnal class III: 96% (n=148) patients in group 1, 3% (n=5) in group2 and 1% (n=1) in group 3 (p=0.04).

Age, hypertension, diabetes, dyslipidemia, Ischemic heart disease, strock attack did not differ among the groups. However male sex, diastolic dysfunction (p=0.01), right ventricular systolic dysfunction (p<0.0001), hospitalisation rate for cardiac decompensation (p<0.0001), high heart rate were higher in the group with 6MWF <300 m.

Conclusion In systolic heart failure outpatients, lower functional capacity during six minute walk is associated with more hospitalizations for cardiac decompensation, more diastolic dysfunction and right ventricular systolic dysfunction with good correlation with NYHA functionnal class.

Keywords six-minute walk, functional capacity, chronic heart failure, NYHA functional class, diastolic function.

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0450

Relation of optimized treatment with frequency of hospitalization for cardiac decompensation in patients with chronic heart failure

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Background Heart failure (HF) is a common public health problem. The neurohormonal blockade modifies this natural history; however, it is often suboptimal. Our objective is to appraise the effectiveness of beta blockers and angiotensin-converting enzyme inhibitor (ACEI) in patients with heart failure and to assess at what percentage we used them to treating HF at target doses.

Methods and results We evaluated medication use in a retrospective cohort of 1841 outpatients followed in therapeutic unit of heart failure for heart failure with reduced ejection fraction. We divided patients on 2 groups: group 1 with cardiac decompensation (n=497, 27%), group 2 with compensated heart failure (n=1344, 73%). The mean age of patients was 65 years with SBP =117.63 in group 1 and 129.4 in group 2, HR =89.3 in group 1, 61.5 bpm in group 2 and sinus rhythm (86.52%). As for treatment, 47% (235/497) in group 1 received a beta-blocker vs 86.75% (1166/1344) in group 2 (p=0.0001) and 85.51% (425/497) in group 1 received ACEI vs 88.61% (1191/1344) in group 2 (p=0.34). As for the doses: 6.63% (33/497) in group 1 received an optimal dose of beta-blocker vs 23% (311/1344) in group 2 and 22% (109/497) in group 1 had an optimized dose of ACEI vs 34.44% (463/1344) in group 2 (p=0.0001).

Conclusion In conclusion, the use of beta blockers and ACEI at target doses is associated with a decreased risk of hospitalization for HF in patients with systolic dysfunction.

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0030

Predictors of one-year mortality in newly diagnosed chronic systolic heart failure

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Objective identifying and measuring predictors of one-year mortality in newly diagnosed chronic systolic heart failure.

Methods we conducted a longitudinal prospective analytical bi -centric study, with one year follow-up.

Results 206 patients were enrolled with a mean age of 54.9±1.8 years, a sex ratio of 1.9. The prevalence of diabetes mellitus was 39.8%, hypertension 30.1%. Coronary artery disease was present in 50.5%, dilated cardiomyopathy in 30.1% and toxic cardiomyopathy in 1.9%. The mortality rate was 12.7% (11.7% in men vs 14.2% in women, p not significant) and re-admission rate was 17.6% (23,1% for men vs 6,6% in women, p=0.004). Most clinical, echographic, biological and functional parameters cited in the literature have demonstrated prognostic predictive value with different rates of sensitivity and specificity. In multivariate analysis, pulmonary vascular resistance (new highly sensitive and specific parameter, RR 47), BNP, TAPSE, dP/dt, the distance travelled in six-minutes' walk test and serum sodium level were predictors of mortality in heart failure. The median survival by Kaplan- Meier was 24 months, with no gender difference. All parameters influencing mortality had an impact on survival. Improving the quality of life as measured by the six minutes' walk test and the MINNESOTA questionnaire was significantly improved in patients remained alive.

Conclusion the evaluation of drug prescriptions trends, according to new international guidelines, is quite reassuring in that the new molecules that allowed a significant reduction in morbidity and mortality in heart failure are widely prescribed in our patients.

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0473

Non ischemic dilated cardiomyopathies complicated with ventricular arrhythmias: evaluation of the diagnostic strategy

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Context Non ischemic dilated cardiomyopathies (NICM) constitute a wide group of cardiac diseases, which don't have an identical evolution and outcome. The diagnosis of NICM is usually based on the results of a trans-thoracic echocardiogram (TTE) and a coronary angiography (CA). Knowledge of their specific